

Congratulations!

FY2002 Batch 3 Competition PROJECT KICKOFF **MEETING**

Date of Kickoff goes here

Company(ies) Name(s) go here

Award Number 70NANBxxxxxx



National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



Project Management Team (PMT)

Project Manager

Name

Phone Number Email address

Business Specialist or Technical Specialist

Name

Phone Number Email address

Grants/Cooperative Agreement Specialist

Name

Phone Number Email address



Today's Goals

- Meet team and establish communications
- Discuss key factors for success
 - ATP project management process
 - Grants processes and requirements
 - Project plans and objectives
 - Year 1 technical milestones
 - Commercialization plans and business goals
- Understand how ATP project fits with long-term goals of company





ATP's Comments

Background

- NIST and ATP: who we are
 - Understanding ATP's perspective
 - Intellectual property
 - FY2002 competition status and results to date
- Establishing Expectations
 - > Project management and planning
 - > Managing change
 - > Reporting requirements
 - > Fluman and animal subjects research
 - > Closeout procedures



NIST's Mission ...

Develop and promote measurement, standards, and technology to enhance productivity, facilitate trade, and improve the quality of life.



Helping America Measure Up

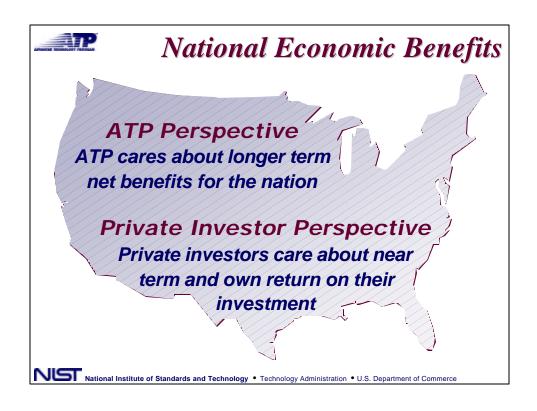
- 3,000 employees
- 1,600 associates
- \$771 million FY04 operating budget
- NIST Laboratories: National measurement standards
- Advanced Technology Program: \$2,114 million co-funding with industry since
- Manufacturing Extension Partnership: 400 centers nationwide to help small manufacturers
- Baldrige National Quality Award

National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



ATP's Mission

To accelerate the development of innovative technologies for broad national benefit through partnerships with the private sector.





Two Major Criteria

- Scientific and Technological Merit (50%)
 - Technical innovation
 - High technical risk with evidence of feasibility
 - > Detailed technical plan
- Potential for Broad-Based Economic Benefits (50%)
 - National economic benefits
 - Need for ATP funding
 - Pathway to economic benefits



Intellectual Property: Protection

- ATP protects your intellectual property
- Proprietary technical and business reports/information is exempt from FOIA
- Mark all documents "proprietary"
- E-mail may not be secure



Intellectual Property **Provisions**

- U.S. for-profits may retain title to inventions
- · Companies may license inventions
- Universities/non-profits:
 - may receive royalties
 - > cannot own title
 - cannot be granted exclusive license to inventions
- Any recipient may hold copyright or trademark
- Government reserves right to paid up, royalty-free non-exclusive license for government use
 - not exercised to date

TP

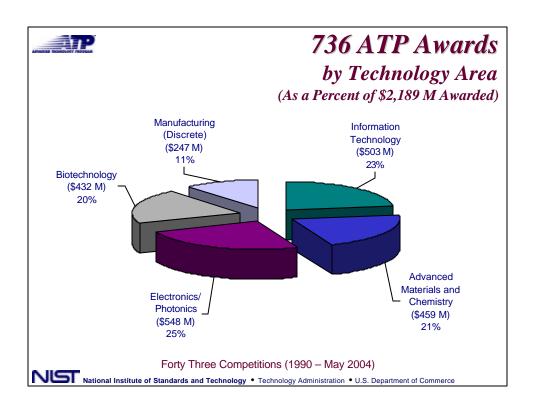
Fourteen Years of Innovation

- Since 1990, 43 competitions
 - ➤ 6,054 proposals, \$12,969 M requested from ATP
- 736 projects awarded
 - > 1,468 participants, > 1,500 subcontractors
- 211 joint ventures and 525 single applicants
- \$4,234 M of high-risk research funded
 - > ATP Share = \$2.189 M
 - ➤ Industry Share = \$2,045 M



Fourteen Years of Innovation (cont'd)

- Small businesses are thriving
 - ➤ 66% of projects led by small businesses
 - 410 single company applicants, 74 joint ventures
 - \$1,154 M in ATP funding
- Over 169 universities represented
 - >639 participation instances, ~\$198 M received
- 30 national laboratories participate
- Over 1,170 patents



TP

FY2002 Batch 3 Competition Results

- 467 proposals submitted
- 69 awards
 - > 11 joint ventures
 - ➤ 58 single companies
 - > \$296 M total funding
 - \$172 M ATP funds
 - \$124 M industry cost share
 - > \$2.5 M average award size



ATP's Comments

- o Geiting Started
 - > NIST and ATP: who we are
 - > Understanding ATP's perspective
 - > Intellectual property
 - > FY2002 competition status and results to date

Establishing Expectations

- Project management and planning
- Managing change
- > Reporting requirements
- Human and animal subjects research
- Closeout procedures



National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



Project Management and **Planning**





Project Management Objectives

- Maintain fidelity to original proposal and cooperative agreement governing the award
- Continued fidelity of project to its original merit against ATP selection criteria
- Monitor progress through reports and other communications
- Monitor technological and business environments
- Company makes all business decisions





ATP Project Management Team Roles

- Project Manager
 - Provides general oversight and PM functions
 - Ensures that the project is executed in accordance with the proposal and the award
 - Recommends appropriate actions to NIST Grants Officer
 - Reviews technical reports and progress against milestones
- Business Specialist
 - > Reviews business and commercialization issues
 - Follows diffusion strategy of results beyond commercialization path
- NIST Grants/Cooperative Agreement Specialist
 - Performs cooperative agreement administration
 - Issues final prior approval for changes (Grants Officer)



Recipient Project Team

- Needs to be well integrated team
- Ensures technical and business personnel work together to accomplish long term commercialization goals
- PI must be familiar with terms and conditions of award, not just the contract administrator

NS

lational Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



Project Management Tools

- Site visits
 - Kickoff, annual, and close-out meetings
 - Additional meetings, as needed or requested
- Technical and business reports
- Audits
- Open communications
 - > phone, email, etc.
- Long-term evaluation



Project Milestones

- Essential element for measuring progress:
 - Define qualitatively and quantitatively what it means to overcome technical barriers
 - Integrate efforts of project tasks
 - Advance state of the technology
 - Describe project's achievements
 - Provide foundation for reporting project activities and accomplishments





Project Milestones (cont'd)

- How ATP uses milestones:
 - Encapsulates scope and merit of original goals
 - > Helps in assessment and comparison of alternative pathways
 - Supports flexibility in project by defining critical project decision points
 - Provides foundation for decision point analysis



Annual Meetings

- Comparison of previous year's accomplishments to milestones
- Comparison of budget vs. progress
- Problems/challenges/opportunities
- Review of technology in light of domestic and global advances in technology and market changes
- Commercialization and market developments
- Establish and achieve mutual understanding of technical milestones and business plans for upcoming year



Project Continuations

- Timeline
 - Obligation of next year's funds
 - can occur 1 2 quarters before continuation date
 - Authorization to spend next year's funds
 - close to actual continuation date
- Requires
 - Prompt submission of complete technical and business reports, and budget changes
 - Approval of revision of any project elements that may change (i.e., tasks, budget)



Managing Change



Change Happens!

- Change is to be expected in conducting innovative, high risk research
- Keep ATP Project Manager and Grants Specialist informed of possible changes
- ATP encourages change that strengthens the project against the ATP selection criteria and makes project success more likely, without unduly diminishing technical risk



What Kind of Change Matters and Why Does Reporting it Matter?

- Any change in the project that can significantly impact the relationship between the project and ATP's criteria and/or the terms and conditions of the award
- Costs may be disallowed if prior written approval is not obtained
- Eligibility may be affected
- Recipient proceeds "at your own risk" prior to approval



National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



We Need to Talk When a Change Could Impact...

- Milestones, decision points, plans, and task timeline
- Risk profile (increases/decreases too much)
- Commercialization plan and national economic benefits
- Budget
- Human and/or animal subjects protocols
- Changes to joint venture participants
- · Company ownership, control, or name



Change in Name or **Ownership**

- Report any change in name or ownership to your Grants Specialist in writing within 15 days after the change becomes legally effective
- Grants Specialist will provide samples of documents needed
- If you are no longer majority U.S.-owned or controlled, a foreign eligibility finding will be required by ATP
- Refer to "ATP Eligibility Criteria for U.S. Subsidiaries of Foreign-Owned Companies: Legislation, Implementation, and Results"

<www.atp.nist.gov/eao/ir-6099contents.htm>



National Institute of Standards and Technology • Technology Administration • U.S. Departm



Written Prior Approval Required for...

- Change in technical plan/tasks/approach from approved proposal
- Transfer of funds among direct cost categories >10% of total annual approved budget
- Key personnel changes
- Sole source subcontracts over \$100K
- Addition, withdrawal, or substitution of:
 - Subcontractors
 - Joint venture participants
- Change in organizational structure, mergers, acquisitions, new foreign ownership or control, bankruptcy protection
- Changes to JV agreements
- Name change
- Involvement of human and/or animal subjects



Managing Change

- Identify potential or actual change and notify ATP and the NIST Grants Specialist early and in writing
- Pursue consistent and auditable decision making
 - simplifies project audits re: prior approval/appropriateness
 - protects award recipient from being at risk for costs
 - maintains peer-reviewed merit of projects
 - > enables ATP to correctly track all project benefits
- Change should result in a project that is equivalent or stronger against ATP's criteria





Reporting Requirements





Reporting During Award

- Technical Reports
 - Quarterly reports
 - > Final technical report
- Financial Reports
- Formatted Business Reports



Reports Are Used for ...

- Project monitoring
- Continuations
- Documenting project changes
- Short- and long-term evaluation



Quarterly Technical Report

- Due within 30 days after end of each <u>calendar</u> quarter
 - reports due NLT: April 30, July 31, October 31, January 31
 - reporting periods: Jan Mar, Apr June, Jul Sept and Oct Dec
- Prepared by PI with input from R&D team
- Submit original report to Grants Specialist
- Submit two copies of report to ATP Project Manager
 - > ATP PM will make further distribution to ATP Business Specialist
- Last quarterly report due 30 days following award end date





Technical Report Content

- Executive Summary
 - Brief statement of project and its end objectives
 - Significant accomplishments during reporting quarter
 - Perspective on status of project in terms of final technical and business objectives
- Project Objectives
- Project Baseline
 - Assess technology at start of project to current state of art
 - Status of technology at large; within team
 - Allows for future assessment of project progress
- Technical Milestones
 - Key remaining ones for the year





Technical Report Content (cont'd)

- Technical progress and impact
 - Report against milestones and metrics
 - Technical findings in reporting quarter and implications for future progress
 - Gantt chart helpful
 - Identify work and progress of each participant (including subcontractors)
- Problems or opportunities
- Potential project changes (technical or business)
- Highlight any business developments of interest
 - Include this info in business quarterly short-form report





Business Reports

- ATP's Economic Assessment Office (EAO) notifies recipient of business reporting requirements
- EAO explains on-line reporting system
- Each recipient receives a company-specific password for on-line submission



Business Reports (cont'd)

- EAO sends formatted reports to recipients to complete on-line, including:
 - Baseline report
 - Anniversary reports
 - Quarterly short-form reports
 - Close-out report
 - Post-project reports (currently telephone) survey)





Business Reporting On-line: Baseline, Anniversary, Closeout

- ATP recipients file following reports on-line via ATP web-based system
 - Baseline reports
 - due within 30 days after end of first calendar quarter
 - Anniversary reports
 - due within 30 days after the end of anniversary quarter
 - Closeout reports
 - due within 90 days after project end



Business Reporting: Quarterly Short-Form Reports

- One page document
 - due 30 days after 2nd, 3rd and 4th calendar quarters
 - submit by hard copy, fax, or email
- · Recipient will review and update organization, address, telephone, and contact information
- Recipient will report significant business developments occurring during quarter



Business Report Content

- General company information
- Business goals and objectives
- Target application areas
- Commercialization strategies
- Collaboration experiences and activities
- Strategies for IP protection and diffusion
- Progress towards commercialization
- Short- and long-term economic impacts

P

Business Report Content (cont'd)

- Update on competitive factors
 - Company's position relative to major competitors
 - Current status of the technology (for project baselining)
 - Major cost and/or performance drivers
 - Project fit within company's strategic vision
- Future investment plans

Key:web T-Telephone Bu	Summary of ATP Business Reporting System					
 Brevity is built in Confidential-participant Comprehensive level of information 	Baseline	Repo	orting S	chedule Close-out	Post Project	
Business Plans -Identification of applications -Strategies for commercialization, protection of IP, and dissemination of non-proprietary information						
Significant business developments						
Update of business plan and progress Products, processes, and licensing activity					?	
Collaboration experiences					?	
Attraction of new funding					?	
• New IP					?	
Technology diffusion					?	
Company financial data					?	
Next 5 years – Technical & Business Goals						
Effects outside your organization					?	
National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce						



Human and Animal Subjects Research



General Information

 Carefully read the ATP publication entitled "Guidelines and Documentation Requirements for Research Involving **Human and Animal Subjects**"

<www.atp.nist.gov/atp/kit-04/has_guide/contents.htm>

To request copy, call 1-800-ATP-FUND



Human Subjects Research Examples

- Bodily materials such as cells, blood, urine, tissues, hair, organs, even if you did not collect the materials
- Humans to test research output such as products, software usability, human-machine interfaces or materials
- Data collected through intervention or interaction with individuals, including data from voice, video, digital or image recordings made for research purposes
- Private information or data that can be readily identified with an individual, including genetic information, medical records, worker surveillance studies, even if you did not collect the information
- Human studies involving categories or classes of subjects such as certain types of workers in an organization





Human Subjects Regulations

- NIST requires full compliance with all Presidential Orders, Federal guidelines, regulations and policies
- Human Subject Protection regulations for DOC are found at 15 CFR Part 27
- Regulations for the protected classes are found at 45 CFR 46 Subpart B, C and D



Human Subjects **Approvals**

- All research involving human subjects must be approved by NIST prior to beginning
- All non-exempt research must be reviewed and approved by an Institutional Review Board (IRB)



Human Subjects Exemptions

- NIST may grant exemptions for research involving human subjects
- Exemptions typically fall into three categories:
 - Normal educational practices in an established or commonly accepted educational setting
 - 15 CFR 27.101(b)(1)
 - Surveys, interviews, observation of public behaviors (unless people can be identified and information disclosure poses risk to the individual)
 - 15 CFR 27.101(b)(2)
 - Pre-Existing sources of data or specimens (if publicly available or subjects are not identifiable)
 - 15 CFR 27.101(b)(4)



Human Subjects Non-exempt Research

- NIST is required to review requests for non-exempt research prior to beginning use of human subjects
- An Institutional Review Board (IRB) must review and approve research
 - NIST IRB cannot perform review
 - NIST cannot provide or recommend IRB services
- The IRB reviewing the research must have an assurance on file with OHRP
 - Multiple Project Assurance (MPA)
 - Federal-wide Assurance (FWA)



National Institute of Standards and Technology • Technology Administration • U.S. De



Human Subjects **Deferred**

- Previously deferred research involving human subjects is allowed to begin only after NIST has reviewed and approved the research
- Depending on the type of research, follow the guidelines and documentation requirements



Animal Subjects Assurances/Certifications

- Each institution housing and caring for live animals must have and maintain at least one of the following:
 - USDA Certification
 - Animal Welfare Assurance (OLAW/AWA)
 - AAALAC Accreditation



Animal Subjects Approvals

- All Animal Study Protocols (ASP's) must have IACUC review and approval prior to beginning research involving animals
- A copy of the approved ASP, the IACUC approval letter and assurance/certification documentation must be submitted to ATP and approved by NIST in advance of using live animals



Human and Animal Subjects **Modifications**

- Notify ATP well in advance if changes are made to your project that involves the use of human or animal subjects
- Contact Human and Animal Subjects Advisor at (301) 975-8779 with any questions



Closeout Procedures



Closeout Meeting

- · Closeout meeting held within last 30 days of award end date
 - if 30 days before, can be charged to project
 - > if 30 days after, cannot be charged to project
- Review requirements for completing closeout
- Recipient project team and ATP PMT meet to review entire ATP project
- Recipient project team compares technical accomplishments against milestones
- Discuss any technical activities or remaining barriers for project success
- Discuss current business activities and keys to move project through to commercialization

National Institute of Standards and Technology • Technology Administration • U.S. Department



Final Technical Performance Report

- Due within 90 days following award end date
- Summarize work performed during entire ATP project
- Discuss technical barriers overcome and milestones achieved
- Discuss plans to achieve any remaining technical milestones
- Review commercialization plans and partnering activities

Last quarterly technical report is not the same as the inal technical performance report!



Final Business Report

- Due within 90 days after project completion
- Document business achievements during project award and discuss future plans for commercialization
- File on-line via ATP web-based business reporting system



Special Economic Studies

- Recipient to participate in a telephone interview to update commercialization activities and other impacts of project
 - > Every 2 years for a total of 6 years beyond project completion
- Recipient may be asked to participate in studies conducted through ATP's EAO to:
 - Evaluate success of ATP in achieving its goal of assisting U.S. businesses in technological development to promote U.S. economic growth



NIST Grants Information



National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



NIST Grants and Agreements Management Division (GAMD) Administrative Highlights for a Single Recipient

Name, Grants Specialist

National Institute of Standards and Technology

Grants and Agreements Management Division 100 Bureau Drive, Stop 3580 Building 411, Room A-143 Gaithersburg, MD 20899-3580 Phone number

Fax number **Email address**





NIST GAMD

- Division Head **Angela McNerney**
- Grants Officer **Marilyn Goldstein**
 - > ATP Awards
- Grants Officer **Shamim Shaikh**
 - Audit Resolution
 - Policy and Procedures





Grants Officer's Core Responsibilities

- Issue and Administer Cooperative Agreements
- Issue Amendments
 - Continuations
 - No-cost extensions
 - Key personnel changes
 - financial officer, administrator, principle investigator and/or project manager
 - Revised technical plans
 - Revised budgets, etc.
 - Approve revisions to joint ventures
 - Authorize human and animal subject research



Grants Officer's Core Responsibilities (cont'd)

- Monitor Recipient Compliance with award terms & conditions
- Only Grants Officer Binds the Government and Approves Changes to the Award

National Institute of Standards and Technology • Technology Administration • U.S. Department of Commerce



Recipient Responsibilities

- Adhere to Terms and Conditions, Related Award Regulations, and Order of Precedence
 - Special Award Conditions (SACs)
 - > ATP General Terms & Conditions
 - DoC Financial Assistance Standard Terms and Conditions
 - > 15 CFR Part 14
 - Cost Principles
 - > ATP Program-Specific Audit Guidelines



- Written Prior Approval Requirements needed for:
 - Change in technical plan/tasks/approach from approved proposal
 - > Transfer of funds among direct cost categories >10% of total annual approved budget
 - Key personnel changes
 - Sole source subcontracts over \$100K
 - > Addition, withdrawal, or substitution of:
 - Subcontractors
 - Joint venture participants
 - Change in organizational structure, mergers, acquisitions, new foreign ownership or control, bankruptcy protection
 - Changes to JV agreements
 - Name change
 - Involvement of human and/or animal subjects





Recipient Responsibilities (cont'd)

- Report Intellectual Property
- Report Changes in Use of Equipment
- Timely Submission of:
 - Quarterly technical, business and financial reports
 - Final technical, business and financial reports
 - Final patent reports
 - Final equipment inventory
 - Audits





- Standards for Financial Management
 - ➤ Time tracking system
 - employee time records
 - cost center(s) for project



Recipient Responsibilities (cont'd)

- Procurement Standards
 - > Written procedures
 - Competitive procurements
 - > Sole source justification
 - Document each procurement or contract
- Keep all Records for Audit Purposes



- Budgets
 - Review costs at end of each budget period
 - Submit revised line item budget and budget narrative (Budget Data)
 - Conduct audit using approved budget



Recipient Responsibilities (cont'd)

- Audits
 - Frequency based upon length of project
 - Who gets audited?
 - recipient
 - R&D subcontracts > \$300K over entire award



Responsibilities of Administrator

- Central Point of Contact
- Request prior approval for changes
- > Administer budget revisions, 10% rule, continuations
- Withdraw funds using ASAP
- > Submit accounting certifications, as appropriate
- > Submit timely audits
- **Ensure** cost-share is met, if applicable
- > Resolve special award contingencies in timely manner, if applicable
- > Submit close-out documentation





Common Audit Problems

- Inadequate documentation
- Failure to obtain prior approval at all, or starting action before approval is obtained
- Late notice of changes
- Activities outside scope of work
- Varying interpretation of rules
- Lack of written policies and procedures in accordance with 15 CFR 14.21(financial management system)





Common Audit Problems (cont'd)

- Estimated costs billed vs. actual
- Issues with valuation of in-kind cost-sharing
- Lack of proper accounting for equipment and depreciation
- · Lack of timely reporting
- Failure to comply with award terms and conditions
- Indirect costs (estimates vs. actual)
- Labor cost estimates/average vs. actual



How to Avoid Audit Problems

- Be familiar with applicable cost principles
- Be familiar with ATP Proposal Preparation Kit
- Be familiar with award terms and conditions
- Expend funds in accordance with approved budget
- Seek written prior approval, when necessary
- Account and report for <u>actual</u> project expenses



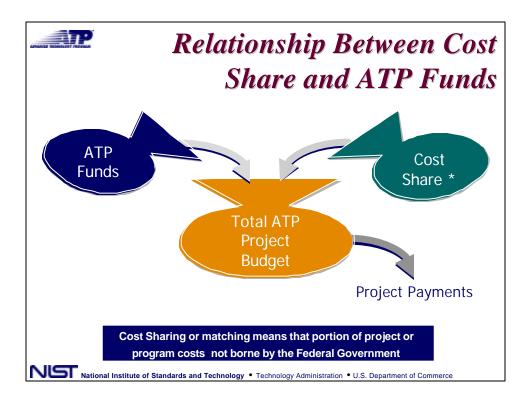
How to Avoid Audit Problems (cont'd)

- Maintain required documentation
- ATP project managers make recommendations to **Grants Officer**
- Grants Officer is the only Authorizing Official
- Avoid last minute budget changes
- Obtain independent CPA advice
- Prepare financial statement in accordance with GAAP



Grants/Cooperative Agreements (An Honors Process)

- Most recipients accomplish project goals with no problems
- Most problems are honest mistakes
- Non-intentional or intentional wrong-doing is discovered
- Enforcement
 - 15 CFR 14.61 and 15 CFR 14.62
 - 15 CFR 24.43 and 15 CFR 24.44





Method of Payment to Recipient

- Withdrawals through ASAP to meet immediate needs
 - note: name change will affect ASAP withdrawals if name change amendment is not issued
- Financial Reports
 - > SF-269 submitted on calendar quarter
 - SF-272 submitted to reconcile advanced funds in accordance with 15 CFR 14.52